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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,475	10/22/2003	Daishi Mori	9333-357	5028
7590 12/17/2004				
BRINKS HOFER GILSON & LIONE POST OFFICE BOX 10395 CHICAGO, IL 60610			EXAMINER BLOUNT, STEVEN	
			ART UNIT 2661	PAPER NUMBER

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/691,475

**Applicant(s)**

MORI ET AL.

**Examiner**

Steven Blount

**Art Unit**

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 - 20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 3 and 5 - 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,816,460 to Ahmed et al.

With regard to claim 1, Ahmed teaches a node 205 (col 5 lines 5+) which processes messages including “a valid duration” – see the description of the “time to live” field in col 7, lines 35+, wherein the node determines whether the message is within the valid duration, and transfers the message (neighbor table) to other nodes if it is, wherein the nodes use the information in the table (which is presumably carried in the body of the message, and is read out as long as the time to live has not expired) to map the local topology. See also col 7, lines 60+. Although it is not explicitly mentioned that the time to live field is carried in the header of the message, one of ordinary skill in the art would find it obvious to place it there.

With regard to claim 2, see the above, and further note that a “valid zone” can be considered to be the local topology described in col 5 lines 1+ and shown in figure 1, area 100. Note that the transfer of the message after proper zone determination is taught in col 5, lines 3+, and note that the destination in the packet (col 4 line 67) can be considered to be the zone information.

With regard to claim 3, see the "position detecting unit" (GPS) taught in col 3, lines 50+.

With regard to claim 5, a vehicle would be an obvious type of "mobile" (see title) to implement the invention of Ahmed et al within.

With regard to claim 6, see the above, including the fact that the zone information is the destination, and that this information is checked, as described in col 5 lines 1+.

With regard to claim 7, see the GPS member mentioned above.

With regard to claim 8, note that the node 105 transmits its neighbor table along with a time to live field, as described in col 7 line 35.

With regard to claim 9, see the rejections above.

With regard to claims 10 – 11, roads and road names are obvious means for defining zones.

3. Claims 4 and 12 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,816,460 to Ahmed et al as applied above to claims 1 and 8, and further in view of U.S. patent 6,636,158 to Bando et al.

With regard to claims 4 and 12, Ahmed et al teaches the invention as described above, but does not teach the use of a flag indicating the message has reached a valid zone. The use of a flag in a similar manner is taught in Bando et al. See col 6 lines 58+, wherein it would have been obvious to use a flag in Ahmed et al to indicate the message has reached a valid zone, in light of the teachings of Bando et al in order to help delineate that the message is within the proper boundaries.

With regard to claims 13 – 14, using a road or a road name are obvious means for defining zones.

4. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,046,978 to Melnik.

With regard to claim 6, Melnik teaches packets with “zone information” – see col 6 line 62, wherein a comparison of the “zone information” in the packet is compared against the routing logical address (col 6 lines 60+) and the said routing logical addresses band (col 6, line 50). Note that retransmission and final processing are taught in col 6 lines 63+. Although the header is not explicitly mentioned to have the “valid zone” information, one of ordinary skill in the art would find it obvious. With regard to claim 15, note the header contains the zone information (abstract, line 11) and note that it is obvious that with regard to the nodes, at least the origination point generates application data.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,046,978 to Melnik in view of U.S. patent 6,816,460 to Ahmed et al.

Melnik teaches the invention as described above with respect to claim 6 (a “wireless network” – see abstract), but does not teach a position location for the message processing device. This is taught in Ahmed et al (GPS) as described above. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used GPS in Melnik in light of the teachings of Ahmed et al in order to more accurately locate the nodes in the wireless system.

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6. Claims 15 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,363,320 to Chou.

In column 7, lines 50+, Chou teaches a zone setting unit in col 7, lines 50 to 67, and an interpretation of the object is carried out by the apparatus as shown in figure 5 for generating application data to be transmitted, as is also described in col 7 lines 63+, wherein the zone information and application data thus generated are transmitted. See col 9, lines 55 – col 10, line 10. See also the use TCP/IP in column 10 line 5. See also figure 1. Although it is not specifically stated that the message has a header, it is obvious to those skilled in this art that TCP/IP messages have headers, and one of ordinary skill in the art would find it obvious to include the zone information in the header.

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or, the response may be faxed to: (703) 872-9306.

For formal communications intended for entry, or for informal or draft communications, please label "PROPOSED" OR "DRAFT".

Any inquiry concerning this communication should be directed to Examiner Steven Blount, whose telephone number is (571) 272 – 3071.

Examiner Blount may normally be reached Monday through Friday between the hours of 9:00 and 5:30. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Kenneth Vanderpuye,

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may be reached at (571) 272 – 3078.

  
**Ajit Patel**  
**Primary Examiner**

SB  
  
12/9/04